

IN THE CLAIMS:

Please cancel claims 26, 27, 31, 32, 36, 37, 40, 42, 47 and 52.

Please amend claims 24, 25, 29, 30, 34, 35, 39, 41, 44, 45, 46, 49, 50 and 51 as follows:

1-23. (Canceled)

24. (Currently Amended) A semiconductor device comprising:

a semiconductor film;

a pair of first impurity regions being formed in the semiconductor film;

an active region formed between the pair of first impurity regions in the semiconductor film;

[[a]] at least two second impurity regions formed partly in said ~~crystal~~-semiconductor film between the pair of first impurity regions;

at least one channel region between the two second impurity regions,

boundaries between the channel region and the second impurity regions extend in a direction along a carrier flow direction of the channel region,

a floating gate formed over and insulated from the active region; and

a control gate formed over and insulated from the floating gate,

wherein the floating gate overlaps a boundary between at least one of the pair of the first impurity regions and the second impurity region.

25. (Currently Amended) A semiconductor device according to claim 24, wherein the second ~~impurity-region~~ regions has a striped shape.

26-27. (Canceled)

28. (Previously Presented) A semiconductor device according to claim 24, wherein an electronic device mounting the semiconductor device is any one of a mobile computer, a head-mounted display, a video camera, a cellular phone, a digital camera, a rear type projector, a front type projector.

29. (Currently Amended) A semiconductor device comprising:

a NOR type circuit having a plurality of memory transistors, the memory transistor comprising:

a semiconductor film;

a pair of first impurity regions being formed in the semiconductor film;

an active region formed between the pair of first impurity regions in the semiconductor film;

[[a]] at least two second impurity regions formed partly in said ~~crystal~~-semiconductor film between the pair of first impurity regions;

at least one channel region between the two second impurity regions,

boundaries between the channel region and the second impurity regions extend in a direction along a carrier flow direction of the channel region,

a floating gate formed over and insulated from the active region; and

a control gate formed over and insulated from the floating gate,

wherein the floating gate overlaps a boundary between at least one of the pair of the first impurity regions and the second impurity region.

30. (Currently Amended) A semiconductor device according to claim 29, wherein the second impurity ~~region~~ regions has a striped shape.

31-32. (Canceled)

33. (Previously Presented) A semiconductor device according to claim 29, wherein an electronic device mounting the semiconductor device is any one of a mobile computer, a head-mounted display, a video camera, a cellular phone, a digital camera, a rear type projector, a front type projector.

34. (Currently Amended) A semiconductor device comprising:

a NAND type circuit having a plurality of one memory transistor, the memory transistor comprising:

a semiconductor film;

a pair of first impurity regions being formed in the semiconductor film;

an active region formed between the pair of first impurity regions in the semiconductor film;

[[a]] at least two second impurity regions formed partly in said ~~crystal~~ semiconductor film between the pair of first impurity regions;

at least one channel region between the two second impurity regions,

boundaries between the channel region and the second impurity regions extend in a direction along a carrier flow direction of the channel region,

a floating gate formed over and insulated from the active region; and

a control gate formed over and insulated from the floating gate,

wherein the floating gate overlaps a boundary between at least one of the pair of the first impurity regions and the second impurity region.

35. (Currently Amended) A semiconductor device according to claim 34, wherein the second impurity ~~region~~ regions has a striped shape.

36-37. (Canceled)

38. (Previously Presented) A semiconductor device according to claim 34, wherein an electronic device mounting the semiconductor device is any one of a mobile computer, a head-mounted display, a video camera, a cellular phone, a digital camera, a rear type projector, a front type projector.

39. (Currently Amended) A semiconductor device comprising:

~~a substrate having an insulating surface;~~

a semiconductor film ~~provided over the substrate;~~

a pair of first impurity regions being formed in the semiconductor;
an active region formed between the pair of first impurity regions in the semiconductor film;
[[a]] at least two second impurity regions formed partly in said crystal-semiconductor film
between the pair of first impurity regions;
at least one channel region between the two second impurity regions,
a floating gate formed over and insulated from the active region; and
a control gate formed over and insulated from the floating gate,
wherein the second impurity regions have a dot-like shape or an elliptical shape;
wherein the floating gate overlaps a boundary between at least one of the pair of the first impurity regions and the second impurity region.

40. (Canceled)

41. (Currently Amended) A semiconductor device according to claim 39 further comprising a substrate, ~~wherein the second impurity regions has a dot-like shape~~ wherein the semiconductor film is formed over the substrate.

42. (Canceled)

43. (Previously Presented) A semiconductor device according to claim 39, wherein an electronic device mounting the semiconductor device is any one of a mobile computer, a head-mounted display, a video camera, a cellular phone, a digital camera, a rear type projector, a front type projector.

44. (Currently Amended) A semiconductor device comprising:

a NOR type circuit having a plurality of memory transistors, the memory transistor comprising:

~~a substrate having an insulating surface;~~

a semiconductor film ~~provided over the substrate;~~

a pair of first impurity regions being formed in the semiconductor film;

an active region formed between the pair of first impurity regions in the semiconductor film;

[[a]] at least two second impurity regions formed ~~partly~~ in said ~~crystal~~-semiconductor film between the pair of first impurity regions;

at least one channel region between the two second impurity regions,

a floating gate formed over and insulated from the active region; and

a control gate formed over and insulated from the floating gate,

wherein the second impurity regions have a dot-like shape or an elliptical shape;

wherein the floating gate overlaps a boundary between at least one of the pair of the first impurity regions and the second impurity region.

45. (Currently Amended) A semiconductor device according to claim 44, wherein the second impurity ~~region~~ regions has a striped shape.

46. (Currently Amended) A semiconductor device according to claim 44 further comprising a substrate, ~~wherein the second impurity regions has a dot-like shape~~ wherein the semiconductor film is formed over the substrate.

47. (Canceled)

48. (Previously Presented) A semiconductor device according to claim 44, wherein an electronic device mounting the semiconductor device is any one of a mobile computer, a head-mounted display, a video camera, a cellular phone, a digital camera, a rear type projector, a front type projector.

49. (Currently Amended) A semiconductor device comprising:

a NAND type circuit having a plurality of one memory transistor, the memory transistor comprising:

~~a substrate having an insulating surface;~~

a semiconductor film ~~provided over the substrate~~;

a pair of first impurity regions being formed in the semiconductor film;

an active region formed between the pair of first impurity regions in the semiconductor film;

[[a]] at least two second impurity regions formed partly in said ~~crystal~~-semiconductor film between the pair of first impurity regions;

at least one channel region between the two second impurity regions,

a floating gate formed over and insulated from the active region; and

a control gate formed over and insulated from the floating gate, wherein the second impurity regions have a dot-like shape or an elliptical shape;

wherein the floating gate overlaps a boundary between at least one of the pair of the first impurity regions and the second impurity region.

50. (Currently Amended) A semiconductor device according to claim 49, wherein the second impurity ~~region~~ regions has a striped shape.

51. (Currently Amended) A semiconductor device according to claim 49 further comprising a substrate, ~~wherein the second impurity regions has a dot-like shape~~ wherein the semiconductor film is formed over the substrate.

52. (Canceled)

53. (Previously Presented) A semiconductor device according to claim 49, wherein an electronic device mounting the semiconductor device is any one of a mobile computer, a head-mounted display, a video camera, a cellular phone, a digital camera, a rear type projector, a front type projector.